

Title (en)

PROCESS FOR PRODUCING FATTY ALCOHOLS FROM FATTY ACIDS

Title (de)

VERFAHREN ZUR HERSTELLUNG VON FETTALKOHOLEN AUS FETTSÄUREN

Title (fr)

PROCÉDÉ DE PRODUCTION D'ALCOOLS GRAS À PARTIR D'ACIDES GRAS

Publication

EP 2614043 A1 20130717 (EN)

Application

EP 12784656 A 20121101

Priority

- GB 201119871 A 20111117
- GB 2012052726 W 20121101

Abstract (en)

[origin: WO2013072664A1] A process for the production of fatty alcohol or alcohols comprising: subjecting a fatty acid or fatty acid mixture to esterification with a lower alkanol in an esterification reactor maintained under esterification conditions to form a stream comprising the corresponding lower alkyl ester or esters; vaporising the stream from step (a); subjecting the vaporised stream of step (b) to hydrogenation in a first hydrogenation zone operated under hydrogenation conditions to form a stream comprising fatty alcohol or alcohols and an amount of unconverted lower alkyl ester or esters; subjecting the stream from step (c) to transesterification in a wax ester reactor maintained under transesterification conditions in the presence of a solid transesterification catalyst thereby to convert at least a portion of the lower alkyl fatty acid ester by ester interchange with a corresponding amount of fatty alcohol or alcohols to a wax ester or esters derived from a fatty alcohol and a fatty acid; separating fatty alcohol or fatty alcohols and wax ester or wax esters of step (d) by distillation to yield a fatty alcohol or alcohols product and a stream comprising wax ester or esters; passing said stream comprising wax ester or esters to a second hydrogenation zone operating under conditions to effect hydrogenation in the liquid phase to revert the wax ester or esters to fatty alcohol or alcohols; and returning the fatty alcohol or alcohols to the separation step (e).

IPC 8 full level

C07C 29/128 (2006.01); **C07C 29/149** (2006.01); **C07C 31/125** (2006.01); **C07C 67/03** (2006.01); **C07C 67/08** (2006.01); **C07C 69/24** (2006.01);
C07C 69/26 (2006.01)

CPC (source: EP GB US)

C07C 29/128 (2013.01 - US); **C07C 29/1285** (2013.01 - US); **C07C 29/149** (2013.01 - EP GB US); **C07C 31/125** (2013.01 - GB US);
C07C 67/03 (2013.01 - EP GB US); **C07C 67/08** (2013.01 - EP GB US); **C11C 3/00** (2013.01 - GB); **C11C 3/003** (2013.01 - GB);
C11C 3/10 (2013.01 - GB); **C11C 3/12** (2013.01 - GB)

Citation (search report)

See references of WO 2013072664A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

WO 2013072664 A1 20130523; BR 112013025627 A2 20161227; BR 112013025627 A8 20180731; BR 112013025627 B1 20200303;
CN 103282335 A 20130904; CN 103282335 B 20160427; CO 6852059 A2 20140130; EA 024091 B1 20160831; EA 201300537 A1 20140430;
EP 2614043 A1 20130717; EP 2614043 B1 20170503; ES 2626328 T3 20170724; GB 201119871 D0 20111228; GB 201402408 D0 20140326;
GB 2507687 A 20140507; MY 161764 A 20170515; SG 189442 A1 20130531; TW 201321343 A 20130601; TW I541223 B 20160711;
US 2014323773 A1 20141030; US 8884078 B1 20141111

DOCDB simple family (application)

GB 2012052726 W 20121101; BR 112013025627 A 20121101; CN 201280003718 A 20121101; CO 14004783 A 20140113;
EA 201300537 A 20121101; EP 12784656 A 20121101; ES 12784656 T 20121101; GB 201119871 A 20111117; GB 201402408 A 20121101;
MY PI2013002673 A 20121101; SG 2013028865 A 20121101; TW 101142948 A 20121116; US 201213884815 A 20121101